

access medium to the first input of the encoder according to the specified list of portions of the plurality of data files.

IN THE DRAWINGS

Please amend the drawings as follows. In Fig. 4, please add reference numeral 51 as indicated in red on the attached sheets.

REMARKS

In response to the Office Action of August 14, 2002, in view of the foregoing amendments and following remarks, reconsideration is requested. A marked up version of the amended paragraphs of the specification is attached. Claims 4, 5 and 20 were amended. A marked up version of these claims is attached. Accordingly, Claims 1, 4-7, 9-11, 13-17, 19 and 20 remain in the application of which claims 1, 4, 5, 6, 17 and 20 are independent. Also attached is a marked-up version of the drawings with changes shown in red.

Objections to the Specification

The disclosure was objected to for several reasons. The foregoing amendments overcome these objections.

Rejection under 35 U.S.C. §112, second paragraph

Claims 4, 5 and 20 were rejected under 35 U.S.C. §112, second paragraph. The foregoing amendments overcome this rejection.

Rejections under 35 U.S.C. §103 in view of Washino and Freeman

Claims 1, 4-7, 9-11, 13-16 and 20 were rejected under 35 U.S.C. §103 as being unpatentable in view of U.S. Patent 5,537,157 ("Washino") and U.S. Patent 5,579,239 ("Freeman").

The rejection is traversed because neither Freeman nor Washino teach or suggest either alone or in combination "means, in the housing, for enabling the individual to specify a sequence of segments of the plurality of data files . . ." as recited in all of the independent claims, for the following reasons.

The independent claims 1, 4, 5, 6 and 17 were previously amended to clarify that a sequence of segments of a sequence of digital images is not merely a sequence of images. In particular, independent claim 1, for example, has been amended to recite "means, in the housing, for enabling the individual to specify a sequence of segments of the plurality of data files . . . "

The Examiner now asserts that, although Washino does not teach files, Freeman does. Thus the Examiner concludes that Washino as modified by Freeman teaches "means, in the housing, for enabling the individual to specify a sequence of segments of the plurality of data files . . ." because Washino (so modified by Freeman) has data files. The substance of the rejection is otherwise identical to the prior Office Action.

Accordingly, the Applicant's reasons for traversing the rejection are similar to those previously presented.

In particular, the Examiner asserts that "a stored video program may be considered a sequence of segments of the still images since each stored still image may be considered a segment, i.e., a frame, and a sequence of such segments constitute a program." As noted in the Applicant's prior reply, this interpretation of the claim language, Washino and Freeman is improper for several reasons. First, the claim recites "means, in the housing, for enabling the individual to specify a sequence of segments of the plurality of data files". The Examiner's interpretation of Washino (as modified by Freeman) equates a "sequence of segments" with a "plurality of digital still images" itself, which would be stored in data files. Such an interpretation renders meaningless the term "enabling the individual to specify a sequence of segments". Second, it is unclear how Washino teaches a "means for enabling a user to specify a sequence of segments" if the sequence of segments is merely a stored video program.

An interpretation of the claims that renders meaningless certain language in the claims cannot be a reasonable interpretation of the claims, and is therefore improper. *See White v. Dunbar*, 119 U.S. 47, 52 (1886) ("The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.")

Accordingly the rejection is traversed for being based upon an improper interpretation of the claim language.

In the prior reply, the Applicant also respectfully disagreed with the Examiner's findings about the teachings of Figs. 3 and 4 of Washino. The Examiner continues to assert that the various elements in Fig. 4 in Washino may be embodied in a camera (by asserting that they meet the claim limitation of "in the housing"). For example, with respect to claims 1, 4, 5, 6 and 20 the Examiner refers to descriptions of Fig. 4 in Cols. 12 and 14 of Washino, and in particular Col. 14, lines 46-53, as teaching that a "means, in the housing, for enabling the individual to specify a sequence of segments of the plurality of data files" is "in the housing."

The Examiner's conclusion can be upheld only if it is based on facts that are supported by substantial evidence. The Examiner apparently considers the *absence* of any teaching requiring the elements of Fig. 4 to be limited to a production facility as evidence of a teaching that these elements may be placed in a video camera, by stating in the prior Office Action:

"There is *no suggestion* that the elements shown in Fig. 4 *preclude* the same kind of application as that contemplated in Fig. 3."
(emphasis added).

Such a subjective belief founded on an absence of a teaching is not a substitute for the required evidence of an objective teaching from the prior art. See *in re Lee*, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

Furthermore, and in contrast, the reference is *explicit* about where editing functions should reside by stating, at Col. 8, lines 55-57:

"Fig. 3 shows the functional diagram for the storage-device-based digital recorder employed in the video camera, *or separately in editing and production facilities.*" (emphasis added).

The *only* function that is taught by Washino as residing in the video camera is the storage-device-based digital recorder. Washino teaches that the recorder also might be used separately in an editing and production *facility*. Washino does *not* suggest, and in fact contradicts any suggestion, that the editing and production facility components may be in the camera.

Accordingly, the rejection also is traversed because it relies on findings of fact that are not supported by substantial evidence.

Rejections under 35 U.S.C. §103 in view of Washino, Freeman and Morita

Claims 17 and 19 were rejected under 35 U.S.C. §103 as being unpatentable in view of U.S. Patent 5,537,157 ("Washino"), U.S. Patent 5,579,239 ("Freeman") and Japanese Patent Application 3-314435 with Publication Number 5-153448 ("Morita").

This rejection is traversed because neither Freeman nor Washino nor Morita teach or suggest either alone or in combination "means, in the housing, for enabling the individual to specify a sequence of segments of the plurality of data files . . ." as recited in all of the independent claims, for the following reasons.

Similar to the rejection of the other claims, this rejection also relies on the Examiner's conclusion that Col. 8, lines 55-56 of Washino teaches that the elements of Fig. 4 of Washino are found in the portable housing. In particular, the Examiner refers to Fig. 4 and descriptions from Cols. 12 and 14 of Washino that refer to elements of Fig. 4. As argued above, the elements referred to by the Examiner that are found in Fig. 4 of Washino are not taught as being in the housing of the recorder.

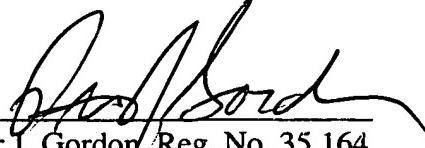
Accordingly, the rejection is traversed.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

A one-month extension of time in which to respond to this Office Action is hereby requested. Please charge the extension fee and any deficiency to **Deposit Account No. 50-0876.**

Respectfully submitted,

By: 
Peter J. Gordon, Reg. No. 35,164
Avid Technology, Inc.
One Park West
Avid Technology Park
Tewksbury, Massachusetts 01876
Tel. No.: 978.640.3011
Attorney for Applicant(s)

Date: December 16, 2002
Docket Number: A95003C3

MARKED UP VERSION OF THE SPECIFICATIONOn page 7:

Please replace the paragraph beginning at line 20 and ending on page 8 at line 3 with the following:

Having now described a general mechanical structure of an embodiment of the moving picture recorder, the electronic circuitry for processing the moving pictures will now be described. The output of the video camera 22, which is generally an analog signal, is provided to the digitizing electronic circuitry such as shown in Figs. 3-9. Referring to Fig. 3, such circuitry generally includes a digitizer 35, compression circuitry 37, and a computer-readable and writable random-access recording medium 39, such as a disk drive, as described above. While the digitizer 35 is used for those video cameras which produce an analog signal, the digitizer would be unnecessary if the output of the video camera were to be digital. In some prior art systems, the image captured by the camera [31] 22 of Fig. 1 is impressed upon a charge coupled device (CCD), well known to those skilled in the art. The CCD produces an electrical signal, which is then processed (either digitally or with analog circuitry) to create an analog video signal so that those signals may be passed to a conventional analog video cassette recorder. A digital video signal or a digital video information stream may be input directly to the compression circuitry 37 of Fig. 3, eliminating the digital-to-analog and analog-to-digital conversions associated with prior art devices from the circuitry within the camera [31] 22.

On page 11:

Please replace the paragraph from lines 9 to 22 as follows:

The media data path controller 94 controls compressed data flow between JPEG Codec 92 and the media data buffer 98. Additionally, it controls compressed data flow between the media data buffer 98 and media storage [100], which is typically a computer readable and writable random access recording medium, such as a magnetic disk 99 or an optical disk. The entire system is controlled by a central processing unit [102] 50. The control of the media data buffer 98 and CPU [102] 50 is described, for example, in U.S. Patent 5,045,940 and others as described above. The central processing unit has a bus [104] 51 which connects it to a system peripheral controller [106] 59 which provides control signals to the entire system. For example,

it provides controls to the media data path 94, JPEG Codec 92, disk controllers for disk(s) 99 [subsystem 100], the YUV bus logic 92, decoder 80, the genlock decoder 60 and the encoders 86 and 88. It is also connected to a read only memory [104] 52 which is used to store control programs in the operating system for the CPU. A flash ROM [106] 54 also is provided in addition to some volatile memory such as dynamic random access memory as shown [in 108] at 56. Finally, a serial I/O controller [110] 58 may be used to provide either an ETHERNET or RS-422 connection to other computers or other equipment.

On pages 11-12:

Please replace the paragraph starting on page 11 at lines 28, through page 12, line 6, as follows:

Digitizing circuitry includes a GENLOCK circuit 104, which processes composite video signals, and a set of analog-to-digital converters 106, associated with a synchronization signal stripping circuit 108, which processes component video signals into a YUV 4:2:2 format digital signal. The composite video signal output by the GENLOCK circuit 104 is provided to a decoder 110, which converts it into [a] digital component information, similar to that output by the analog-to-digital converters 106. The horizontal synchronization signal (HSYNC), vertical synchronization signal (VSYNC), and the pixel clock (PIX) are used to synchronize the rest of the circuit. The composite signal is provided along a bus 109 to a decoder 110 which translates it into a YUV 4:2:2 digital component signal. The composite signal is also directed to encoder [152] 162.

On page 13:

Please rewrite the paragraph at page 13, lines 19-29 as follows:

This system may also be provided with the capability of providing an output video signal generated from the digitized video signal. For example, the pixel bus 112 may be connected to an overlay circuit 150. The output of the overlay circuit 150 and the composite signal on bus 109 may be provided to an encoder 152. The output of the encoder may be provided back to the camera which has an input for the view finder 154. Additionally, this signal may be provided to monitor output 156. In one embodiment of the invention, the camera's view finder 154 receives

a signal not only from the camera, but also from an alternate source. Using this capability, the moving picture recorder may have a controller 158 and an associated memory 160 which may provide additional status information via the view finder in connection with the video being recorded. Such status information may be an indication of battery level, time codes, time of day, function performed (e.g., recording or playback), etc.

On page 14:

Please rewrite the paragraph at lines 5-11 as follows:

The moving picture recorder may include an additional encoder 162 which provides a composite-out video signal with VITC/LTC control information. The input to the encoder may be any one of the pixel bus 112, the output of decoder 110, bypassing pixel bus 112, the output of A/D converters 106, bypassing pixel bus 112, or the output [109] of genlock circuit 104 on bus 109. Alternatively, each of these inputs may be applied to its own separate encoder. The outputs of these encoders may be fed to a simple switch allowing for the selection of one of these outputs. Additionally, an ETHERNET connection 164 may also be provided.

On page 16:

Please rewrite the paragraph at lines 14-16 as follows:

The recorder [62] 20 in Fig. 1 also may include a number of pressure sensitive or other suitable controls [64] 34 to provide recording and edit function for the material displayed on display 30. The display 30 may be of a LCD or other suitable thin panel type.

MARKED UP VERSION OF AMENDED CLAIMS UNDER 37 C.F.R. 1.121

4. (Four times amended) A digital video recording device, comprising:

a portable housing;

a camera mounted [on] in the portable housing having an output providing a video signal;

a decoder mounted in the portable housing having an input connected to the output of the camera and an output providing digital video information as a sequence of digital still images;

a random-access, computer-readable and writeable medium mounted in the portable housing and for storing digital video information from the decoder as a sequence of digital still images in a computer-readable file format and for providing digital video information stored thereon;

means, in the portable housing, for enabling a user to capture sequences of digital still images from the decoder into a plurality of data files on the random-access, computer-readable and writeable medium, wherein each of the plurality of data files stores a sequence of digital still images;

an encoder mounted in the portable housing and having an input for receiving a sequence of digital still images and having an output for providing an output video signal from the received sequence of digital still images;

a switch mounted in the portable housing having a first input for receiving the sequence of digital still images from the decoder and a second input for receiving the sequence of digital still images from the random-access, computer-readable and writeable medium, and an output connected to provide one of the received sequences of digital still images to the input of the encoder;

an interface on the portable housing for causing the switch to provide one of the first and second inputs to the input of the encoder; and

means, in the portable housing, for enabling the user to specify a sequence of segments of the plurality of data files stored on the random-access, computer-readable and writeable medium; and

means, in the portable housing, for enabling the user to initiate playback of full motion video by the encoder by providing the digital still images from the plurality of data files stored

on the random-access, computer-readable and writeable medium through the switch according to the specified sequence of segments of the plurality of data files.

5. (Four times amended) A digital video recording device, comprising:

a portable housing;

a camera mounted [on] in the portable housing having an output for providing a full motion video signal;

a digital, computer-readable and writeable random access medium mounted in the portable housing;

means, in the portable housing, for enabling a user to capture digital video information corresponding to the full motion video signal into a plurality of data files in a computer readable file format on the digital, computer-readable and writeable random-access medium;

an encoder mounted in the portable housing and having a first input for receiving digital video information from files stored on the digital computer-readable and writeable random-access medium, a second input for receiving digital video information corresponding to the full motion video signal from the camera and an output providing a video signal according to the first or second input;

means in the portable housing for causing the encoder to select between the first and second inputs; and

means in the portable housing for enabling the user to specify a sequence of segments of the plurality of data files stored on the digital, computer-readable and writeable random-access medium; and

means in the portable housing for enabling the user to initiate playback of full motion video by the encoder by providing the digital video information from the plurality of data files stored on the digital, computer-readable and writeable random-access medium to the first input of the encoder according to the specified sequence of segments of the plurality of data files.

20. (Amended) A digital video recording device, comprising:

a portable housing;

a camera mounted [on] in the portable housing having an output for providing a full motion video signal;

a digital, computer-readable and writeable random access medium mounted in the portable housing;

means, in the portable housing, for enabling a user to capture digital video information corresponding to the full motion video signal into a plurality of data files in a computer readable file format on the digital, computer-readable and writeable random-access medium;

an encoder mounted in the portable housing and having a first input for receiving digital video information from files stored on the digital computer-readable and writeable random-access medium, a second input for receiving digital video information corresponding to the full motion video signal from the camera and an output providing a video signal according to the first or second input;

means in the portable housing for causing the encoder to select between the first and second inputs; and

means in the portable housing for enabling the user to specify a list of portions of the plurality of data files stored on the digital, computer-readable and writeable random-access medium; and

means in the portable housing for enabling the user to initiate playback of full motion video by the encoder as a contiguous output signal by providing the digital video information from the plurality of data files stored on the digital, computer-readable and writeable random-access medium to the first input of the encoder according to the specified list of portions of the plurality of data files.